60. A parenteral therapeutic agent for the treatment of bacterial infections, said parenteral therapeutic agent produced by the method of:

(a) obtaining an effective amount of at least one enzyme genetically coded for by bacteriophage specific for a specific bacteria, wherein said at least one enzyme is selected from the group consisting of lytic enzymes, shuffled lytic enzymes, chimeric lytic enzymes, holin lytic enzymes, and combinations thereof, said at least one enzyme having the ability to digest a cell wall of a specific said bacteria; and,

(b) mixing (a) with a carrier for the parenteral delivery of said at least one lytic enzyme to the site of the infection.

61. The parenteral therapeutic agent according to claim 60, wherein the at least one said enzyme is for the treatment of Pseudomonas.

62. The parenteral therapeutic agent according to claim 60, wherein the at least one said enzyme is for the treatment of Streptococcus

63. The parenteral therapeutic agent according to claim 60, wherein the at least one said enzyme is for the treatment of *Staphylococcus*.

64. The parenteral therapeutic agent according to claim 60, wherein the at least one said enzyme is for the treatment of *Clostridium*.

65. The parenteral therapeutic agent according to claim 60, wherein said composition further comprises a buffer that maintains pH of the composition at a range between about 4.0 and about 9.0.

A1 cont.

66. The parenteral therapeutic agent according to claim 65, wherein the buffer maintains the pH of the composition at the range between about 5.5 and about 7.5.

67. The parenteral therapeutic agent according to claim 65, wherein said buffer comprises a reducing reagent.

68. The parenteral therapeutic agent according to claim 67, wherein said reducing reagent is dithiothreitol.

69. The parenteral therapeutic agent according to claim 65, wherein said buffer comprises a metal chelating reagent.

70. The parenteral therapeutic agent according to claim 69, wherein said metal chelating reagent is ethylenediaminetetracetic disodium salt.

71. The parenteral therapeutic agent according to claim 65, wherein said buffer is a citrate-phosphate buffer.

72. The parenteral therapeutic agent according to claim 60, further comprising a bactericidal or bacteriostatic agent as a preservative.

A1 cont.

73. The parenteral therapeutic agent according claim 60, further comprising administering a concentration of about 100 to about 500,000 active enzyme units per milliliter of fluid in the wet environment of the nasal or oral passages.

74. The parenteral therapeutic agent according to claim 73, further comprising administering the concentration of about 1000 to about 100,000 active enzyme units per milliliter of fluid in the wet environment of the nasal or oral passages.

75. The parenteral therapeutic agent according to claim 60, wherein said therapeutic agent is administered intravenously.

76. The parenteral therapeutic agent according to claim 60, wherein said therapeutic agent is administered intramuscularly.

77. The parenteral therapeutic agent according to claim 60, wherein said therapeutic agent is administered subcutaneously.

78. The parenteral therapeutic agent according to claim 60, wherein the therapeutic agent further comprises at least one complementary agent which potentiates the bactericidal activity of the lysine enzyme, said complementary agent being selected from the group consisting of penicillin, synthetic penicillins bacitracin, methicillin, cephalosporin, polymyxin, cefaclor, Cefadroxil, cefamandole nafate, cefazolin, cefixime, cefmetazole, cefonioid, cefoperazone, ceforanide, cefotanme, cefotaxime, cefotetan, cefoxitin, cefpodoxime proxetil, ceftazidime, ceftizoxime, ceftriaxone, cefriaxone moxalactam, cefuroxime, cephalexin, cephalosporin C, cephalosporin C sodium salt, cephalothin, cephalothin sodium salt, cephapirin, cephradine, cefuroximeaxetil, dihydratecephalothin, moxalactam, loracarbef, mafate and chelating agents in an amount effective to synergistically enhance the therapeutic effect of the lysin enzyme.

A1 cont.

79. The parenteral therapeutic agent according to claim 60, wherein said at least one said holin lytic enzyme is a shuffled holin lytic enzyme.

80. The parenteral therapeutic agent according to claim 60, wherein said at least one holin enzyme is a chimeric holin lytic enzyme.

81. The parenteral therapeutic agent according to claim 60, further comprising at least